

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of )  
Dally MOYA et al. ) Group Art Unit: Unassigned  
Application No.: Unassigned ) Examiner: Unassigned  
Filed: July 31, 2001 )  
For: (METH)ACRYLIC ESTER BINDERS )  
FROM GLYCOLYZED AROMATIC )  
POLYESTERS )

**PRELIMINARY AMENDMENT**

Assistant Commissioner for Patents  
Washington, D.C. 20231

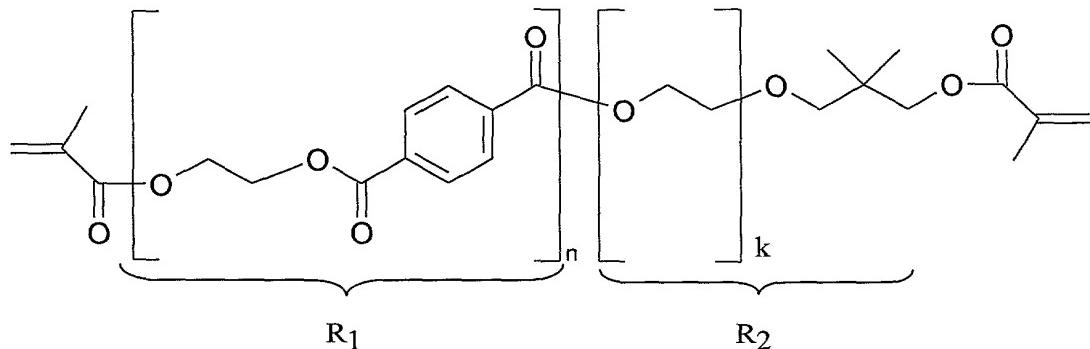
Sir:

Prior to examination of the above-identified patent application, please first enter the following amendments.

**IN THE CLAIMS:**

Kindly replace claims 3-11, 13, 15-16, and 18-19 as follows:

3. (Amended) The binder of claim 1 that comprises the oligomer represented by



wherein R<sub>1</sub> is a repetition unit of PET

R<sub>2</sub> is an ethoxylated neopentyl glycol derived radical

n is 1 to 4, and

k is 1 to 3.

4. (Amended) The binder of Claim 1 that is obtainable by the steps of (i)

generating hydroxy terminated binder precursor oligomers (OH-precursors) derived from at least one aromatic polyester, and (ii) reacting said OH-precursors of step (i) with methacrylic acid and/or acrylic acid to form a respective ester, whereby step (i) comprises reacting an aromatic polyester, or a mixture of aromatic polyesters with at least one polyol and/or at least one aminopolyol to generate hydroxy terminated oligomers.

5. (Amended) The binder of Claim 1, which is a methacrylate binder.

6. (Amended) The binder of Claim 1, which is derived from PET.

7. (Amended) The binder of Claim 4, which is preparable using as polyol at least one diol, at least one triol or a mixture thereof, preferably a polyol selected from the group consisting of diethylene glycol, ethoxylated neopentyl glycol, di-(2-hydroxyethyl)-5,5-dimethylhydantoin, 1,3-dimethylol-5,5-dimethylhydantoin, tri-(2-hydroxyethyl)-isocyanurate, hydroxyalkyl isocyanurates, and mixtures thereof.

8. (Amended) The binder of Claim 4, which is preparable using a mixture of at least one polyol and/or at least one aminoalcohol and at least one monofunctional alcohol, preferably a monofunctional alcohol selected from the group consisting of C<sub>5</sub>-C<sub>22</sub> linear saturated alcohols, C<sub>5</sub>-C<sub>22</sub> linear unsaturated alcohols, C<sub>5</sub>-C<sub>22</sub> branched saturated alcohols, C<sub>5</sub>-C<sub>22</sub> branched unsaturated alcohols, and mixtures thereof, more preferably a monofunctional alcohol selected from the group consisting of 4-methyl-1-pentanol, hexanol, lynoleyl alcohol, benzyl alcohol, trimethylolpropane diallylether, allyl alcohol, nonanol, and mixtures thereof.

9. (Amended) The binder of Claim 7, wherein the alcohol is selected from monohydroxy functional or dihydroxy functional polymers or oligomers selected from the group consisting of polyethers, polyesters, polyurethanes, polycaprolactones or mixtures thereof.

10. (Amended) The binder of Claim 4, wherein said OH-precursors of step (i) that are further reacted in step (ii) are identical with said hydroxy terminated oligomers.

11. (Amended) The binder of Claim 4, wherein said OH-precursors of step (i) that are further reacted in step (ii) are obtainable by further reacting said hydroxy terminated oligomers with at least one polycarboxylic acid and/or at least one polycarboxylic anhydride.

13. (Amended) Method for the production of a binder of Claim 4 comprising the steps of (i) generating OH-precursors from at least one aromatic polyester, and (ii) reacting

said OH-precursors of step (i) with methacrylic acid and/or acrylic acid to form a respective ester, whereby step (i) comprises reacting an aromatic polyester, or a mixture of aromatic polyesters with at least one polyol and/or at least one aminopolyol to generate hydroxy terminated oligomers.

15. (Amended) A composition of binders comprising binders of Claim 1 and at least one other (meth)acrylate and/or ethylenically unsaturated vinyl monomer.

16. (Amended) A formulation comprising a binder of Claim 1 and at least one further substance selected from the group consisting of initiators, catalysts, stabilizer, binders different from a (meth)acrylate binder or ethylenically unsaturated vinyl monomer, fillers and additives.

18. (Amended) Use of a binder of Claim 1 as or in an adhesive, coating, flooring, mortar, or casting compound.

19. (Amended) Method for producing a joint, coating or flooring, wherein a binder of Claim 1 is applied on at least one substrate such that wetting and adhesion is achieved.

**REMARKS**

The present Preliminary Amendment amended the European-style phrasing of the claims into standard U.S. format. In particular, all multiple dependencies have been eliminated from the original claims. It is to be understood that the revisions to the claims are solely for formalistic purposes and not with regard to patentability.

Entry of the instant Preliminary Agreement and favorable consideration on the merits are respectfully requested.

Should Examiner have any question concerning the subject application, the Examiner is invited to contact the undersigned attorney at the number provided below.

Respectfully Submitted,

BURNS, DOANE, SWECKER & MATHIS, L.L.P.

By:



Bruce J. Boggs, Jr.  
Registration No. 32,344

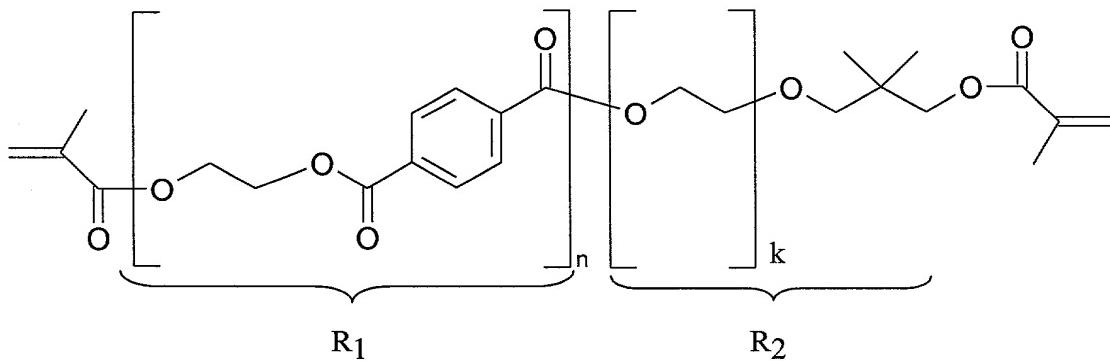
P.O. Box 1404  
Alexandria, Virginia 22313-1404  
(703) 836-6620

Date: July 31, 2001

**Attachment to Preliminary Amendment dated July 31, 2001**

**Marked-up Claims**

3. (Amended) The binder of Claim 1 [or 2] that comprises the oligomer represented by



wherein  $R_1$  is a repetition unit of PET

$R_2$  is an ethoxylated neopentyl glycol derived radical

$n$  is 1 to 4, and

$k$  is 1 to 3.

4. (Amended) The binder of [anyone of the preceding claims] Claim 1 that is obtainable by the steps of (i) generating hydroxy terminated binder precursor oligomers (OH-precursors) derived from at least one aromatic polyester, and (ii) reacting said OH-precursors of step (i) with methacrylic acid and/or acrylic acid to form a respective ester, whereby step (i) comprises reacting an aromatic polyester, or a mixture of aromatic polyesters with at least one polyol and/or at least one aminopolyol to generate hydroxy terminated oligomers.

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**Marked-up Claims**

5. (Amended) The binder of [anyone of the preceding claims] Claim 1, which is a methacrylate binder.

6. (Amended) The binder of [anyone of the preceding claims] Claim 1, which is derived from PET.

7. (Amended) The binder of [anyone of claims 4 to 6] Claim 4, which is preparable using as polyol at least one diol, at least one triol or a mixture thereof, preferably a polyol selected from the group consisting of diethylene glycol, ethoxylated neopentyl glycol, di-(2-hydroxyethyl)-5,5-dimethylhydantoin, 1,3-dimethylol-5,5-dimethylhydantoin, tri-(2-hydroxyethyl)-isocyanurate, hydroxyalkyl isocyanurates, and mixtures thereof.

8. (Amended) The binder of [anyone of claims 4 to 7] Claim 4, which is preparable using a mixture of at least one polyol and/or at least one aminoalcohol and at least one monofunctional alcohol, preferably a monofunctional alcohol selected from the group consisting of C<sub>5</sub>-C<sub>22</sub> linear saturated alcohols, C<sub>5</sub>-C<sub>22</sub> linear unsaturated alcohols, C<sub>5</sub>-C<sub>22</sub> branched saturated alcohols, C<sub>5</sub>-C<sub>22</sub> branched unsaturated alcohols, and mixtures thereof, more preferably a monofunctional alcohol selected from the group consisting of 4-methyl-1-pentanol, hexanol, lynoleyl alcohol, benzyl alcohol, trimethylolpropane diallylether, allyl alcohol, nonanol, and mixtures thereof.

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**Marked-up Claims**

9. (Amended) The binder of Claim 7 [or 8], wherein the alcohol is selected from monohydroxy functional or dihydroxy functional polymers or oligomers selected from the group consisting of polyethers, polyesters, polyurethanes, polycaprolactones or mixtures thereof.

10. (Amended) The binder of [anyone of claims 4 to 9] Claim 4, wherein said OH-precursors of step (i) that are further reacted in step (ii) are identical with said hydroxy terminated oligomers.

11. (Amended) The binder of [anyone of claims 4 to 9] Claim 4, wherein said OH-precursors of step (i) that are further reacted in step (ii) are obtainable by further reacting said hydroxy terminated oligomers with at least one polycarboxylic acid and/or at least one polycarboxylic anhydride.

13. (Amended) Method for the production of a binder of [anyone of claims 4 to 12] Claim 4 comprising the steps of (i) generating OH-precursors from at least one aromatic polyester, and (ii) reacting said OH-precursors of step (i) with methacrylic acid and/or acrylic acid to form a respective ester, whereby step (i) comprises reacting an aromatic polyester, or a mixture of aromatic polyesters with at least one polyol and/or at least one aminopolyol to generate hydroxy terminated oligomers.

**Attachment to Preliminary Amendment dated July 31, 2001**

**Marked-up Claims**

15. (Amended) A composition of binders comprising binders of [one of claims 1 to 12] Claim 1 and at least one other (meth)acrylate and/or ethylenically unsaturated vinyl monomer.
16. (Amended) A formulation comprising a binder of [anyone of claims 1 to 12 or a composition of claim 15] Claim 1 and at least one further substance selected from the group consisting of initiators, catalysts, stabilizer, binders different from a (meth)acrylate binder or ethylenically unsaturated vinyl monomer, fillers and additives.
18. (Amended) Use of a binder of [anyone of claims 1 to 14 or a composition of claim 15 or a formulation of claim 16 or 17] Claim 1 as or in an adhesive, coating, flooring, mortar, or casting compound.
19. (Amended) Method for producing a joint, coating or flooring, [characterized in that] wherein a binder of [one of claims 1 to 14 or a composition of claim 15 or a formulation of claim 16 or 17] Claim 1 is applied on at least one substrate such that wetting and adhesion is achieved.